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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,381	02/06/2004	Tong Shik Shin	SHIN3004/EM	5747

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EXAMINER

OJINI, EZIAMARA ANTHONY

ART UNIT PAPER NUMBER

3723

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/772,381

Applicant(s)

SHIN, TONG SHIK

Examiner

Anthony Ojini

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over

**Applicant Admitted Prior Art (AAPA)** in view of **Lai et al** (6,561,887 B2)).

**With respect to claims 1,2**, AAPA discloses grinding wheel comprising: a backing disk (12) having a center hole; a plurality coated abrasives flaps circumferentially arranged the backing disk and attached thereto; and fastening member (32) for fixing wheel (fig. 2).

**AAPA** fails to disclose a **bolt** being fitted through the center hole of the backing disk, the bolt having **head of a size larger** than that of the central hole so that hangs from backing disk; and a **holder** having an upper part into which bolt fitted and lower part connected rotating part a grinder bolt to grinding. AAPA also fails to disclose wherein the upper part of the holder has an internal thread portion and the bolt is screw-fitted into the internal thread portion.

**Lai et al.** disclose a **bolt** being fitted through center the hole of a backing disk, the bolt having **head of a size larger** than that of the central hole so that hangs from backing disk; and a **holder** having an upper part with internal thread portion into which bolt fitted and lower part connected to a rotating part a grinder (see fig. 2).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of AAPA with a **bolt** being fitted through center the hole of a backing disk, wherein the bolt include a **head of a size larger** than that of the central hole so that hangs from backing disk; and a **holder** having an upper part with internal thread portion into which bolt fitted and lower part connected to a rotating part a grinder in view of Lai et al. so as to retain the grinding disk firmly to a rotating part the grinder.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Applicant Admitted Prior Art (AAPA)** in view of **Lai et al** as applied to claim 1 above, and further in view of **Williams** (5,637,033).

**With respect to claim 3**, AAPA fails to disclose wherein the fastening member includes a **washer** and **nut**, which are sequentially fitted onto the bolt protruding from the backing disk.

**Williams** discloses a fastening member that includes a **washer** (30) and **nut** (32), which are sequentially fitted onto the bolt protruding from the backing disk (see fig. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of AAPA with a fastening member that includes a **washer** and **nut** which are sequentially fitted onto the bolt protruding from the backing disk in view of Williams so as to further assist in centering the grinding wheel as the nut is tightened against the lower surface of the backing disk.

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**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Ward, Sr., Miller et al., and Bullock disclose abrasive wheel having fastening member respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Ojini whose telephone number is 703 305 3768. The examiner can normally be reached on 7 to 4 Tuesday-Friday with every other Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 703 308 2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AO  
11/18/04

